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Abstract

Current exploratory work on one element of one component of the development and evaluation of a comprehensive guidance system has been reviewed. This element, the Personal and Social Development Program (PSDP), is an attempt to assist students in the assessment and modification of their academic and interpersonal behaviors. Designed to operate within an individualized educational context where computer-monitored resources are available, this element is intended as an important part of the prescriptive phase of guidance focusing on problem delineation and correction. Much of the preliminary development work clarifying the objectives and assumptions of the PSDP and implementing the Program with intermediate and secondary students has been completed and is now being field tested. Controlled experimentation of the effectiveness of the prescribed learning experience booklets is planned for the spring and fall of 1969. The main criterion for such experimentation will be the extent to which these PSDP booklets assist students to modify their behavior in order to accomplish their goals related to the broad objectives of the program. (Author)

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ELEMENTS IN THE PRESCRIPTIVE PHASE OF A COMPREHENSIVE GUIDANCE SYSTEM

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One of the basic postulates influencing our thinking in designing a comprehensive guidance system is that it must place major emphasis on a continuous, sequential program of developmentally-oriented learning activities and not on the remediation of specific student difficulties. However, this constraint does not obviate the necessity of having a prescriptive phase of guidance. It does suggest that too much effort is focused on this phase within many of the guidance programs currently being implemented in school settings. Morse, Finger and Gilmore (1968) introduced their recent review of innovations in school mental health programs by predicting that eventually most guidance programs

> will include comprehensive primary prevention as well as rehabilitation, both monitored by systematic evaluation. After the fashion of the community mental health approach, the elements will be built into the ongoing educational process rather than added on (p. 460).

Our hope is to bring this prediction closer to fulfillment by completing some of the preliminary steps in the development and evaluation of both aspects of a comprehensive guidance system integrated in the instructional process at all academic levels. Project PLAN presents a significantly flexible opportunity for implementing these steps. Our current work both within Project PLAN schools and schools using conventional instructional procedures is supported by a grant John C. Flanagan received from the Division of Comprehensive and Vocational Education Research of the United States Office of Education. The purpose of this paper is to outline some of our ideas and efforts on the corrective or rehabilitative aspects of guidance.

The Prescriptive Phase of Guidance

As currently designed (Jones & Nelson, 1969) two components constitute the prescriptive phase of a comprehensive career guidance system. The flexibility and student planning opportunities available in a program of individualized education such as that described by Silberman and Carter (1965), Morgan and Bushnell (1966) or Flanagan (1968) make it easier to integrate these components directly

into the total curriculum than is possible within a conventional instructional program. Through the development of a full complement of instructional activities within these components as well as within those in the developmentally-oriented phase of guidance, significant progress can be made toward making it possible for this comprehensive guidance system to serve all the guidance needs of each student at each academic level.

The components representing the prescriptive phase of guidance focus on problem correction or remediation. Here the related instructional activities are not intended for all students as are those activities in the developmentally-oriented phase which emphasizes problem prevention and student formulation and pursuit of immediate and long-range goals. Student learning activities within the prescriptive phase are intended only for those students who are experiencing identifiable problems for which assistance is available within the system.

Prescriptive guidance necessitates the development and evaluation of "prescribed learning experiences" (PLE's) available for students with specifiable needs which are amenable to self-instructional or small group instructional processes. The PLE's are instructional units presenting behavioral objectives written for student comprehension followed by appropriate instructions for learning activities intended to enable students to achieve these objectives. Activities recommended might involve the use of resources such as booklets, videotapes, audiotapes, group discussion, individual or group counseling, or visitations with community resource personnel. In order to help students perceive these activities as meaningfully related to, and not isolated from, their processes of continuous personal and social development, consistent efforts need to be made to integrate this assistance with attempts to help students formulate and pursue their immediate and long-range goals.

The preliminary study of commonalities among various student needs identified as a first step in our investigation has led to specification of the following two components in prescriptive guidance.

Within-school prescribed learning experiences:

> Goal: for each student to have assistance which enables him to resolve academic (i.e., learning) and interpersonal problems and specific questions which are impeding his current progress and development. The number of such learning experiences is manifold. Examples are activities for behavior assessment and modification as well as activities providing information on specific jobs, schools, courses, etc.

Orientation-out prescribed learning experiences:

> Goal: for each student to acquire the various kinds of information, understandings, overt behaviors, and attitudes he needs in order to function effectively when he exits from an educational system or a specific school setting. The student's needs here will vary, dependent upon what he anticipates doing after he terminates his involvement in a system or setting--e.g., entering the world of work, attending an institution of higher education, dropping out without specific plans, having a family, enlisting in the military.

Our project is attempting to compile a body of techniques and procedures which can be used to implement these as well as the other components of a comprehensive guidance system. Where techniques and procedures are not available some prototypes are being developed. This development will not exhaust the range of all possible strategies but will facilitate experimentally controlled comparisons of the relative effectiveness of a few of them. The remainder of this presentation will be devoted to a description of our current investigation of the first of these two components.

Personal and Social Development Program: Objectives and Assumptions

The Personal and Social Development Program (PSDP) combining student behavior assessment procedures with behavior modification techniques is a major element of the "within-school prescribed learning experiences" component. This element is

designed to assist students at all academic levels to assess the present status of some of their academic (i.e., learning) and interpersonal behaviors, to acquire and perform behaviors they desire, as well as to reduce or improve other behaviors which invariably seem to interfere with student success in school academic activities and social relationships. These are behaviors which educators traditionally have considered to be significant for students to develop or change but which also have been regarded as difficult to assess objectively and to modify effectively. Behaviors amenable to the application of similar kinds of behavior modification techniques have been grouped into eight categories represented by the following general objectives for students.

- To deal effectively with difficult situations (e.g., when he fails or is teased or is criticized).
- To carry through on assigned and agreed-upon tasks with responsibility and effort.
- To show independence, initiative and originality when faced with unexpected situations or special needs.
- To show personal honesty and integrity toward work and in dealing with others.
- To show consideration for the feelings of others.
- To contribute to group interests and goals.
- To deal effectively with rules, conventions and teacher suggestions.
- To function effectively in a leadership position when in a small group or with another student.

Several assumptions are fundamental to the PSDP. A few of the more basic ones are noted here to delineate the main part of the rationale for the Program's approach to helping students achieve the objectives just listed.

1. The Program assumes that modification of overt student behavior is more relevant to achievement of these objectives than is attitude change, self-concept improvement, or student acquisition of the knowledge, concepts and principles of human development.

Support for this assumption is provided by reviews such as those of Festinger (1964) and Cohen (1964) which decry the absence of research and theoretical explorations on the effect of attitude, opinion and knowledge change on subsequent behavior. In fact, Festinger found only three relevant studies and the data from each of these suggested that an inverse relationship might exist between attitude and behavior change. If little is known about the relationship between attitudes and behaviors and if education is more concerned with the overt performance of students rather than their verbalizations of how they think they will be able to perform, it seems foolish to concentrate on anything less than behavior change in public school mental health programs.

2. From the previous assumption it follows that the assessment strategies selected to provide information for the modification of student behavior and to evaluate the effectiveness of the PSDP must concentrate on the recording of overt behaviors. It is further assumed that direct observations of student behavior in naturalistic or realistically contrived situations is the most valid assessment procedure for this Program. These observations should be as objective and factual as possible. Observer interpretations or evaluations of the observed behavior should be reduced to a minimum or eliminated completely. The inadequacy of subjective evaluations of human behavior such as in rating scale procedures used in personality and behavior assessment is well documented (cf. Flanagan, 1962; Vernon, 1964; Mischel, 1968). Vernon's conclusion following his review of the literature vividly summarizes our reasons for seeking a more objective assessment strategy than that provided by ratings.

> It seems best to regard ratings, not so much as summaries of objectively observed behavior, but as rationalizations abtracted from the rater's overall picture (his homunculus) of the subject (1964, p. 59).

3. Students in an individualized instructional context are encouraged to take personal responsibility for their behavior. The PSDP has been designed for a guidance system operating in a context of student responsibility. Therefore, it is

assumed that each student should be assisted to take a leadership role in the assessment and modification of his own behavior. This approach contrasts sharply with most behavioral modification programs used in educational settings (cf. Gropper, 1967; Spivak & Swift, 1967; O'Leary & Becker, 1967). In these programs the behavior modifiers are teachers, counselors, administrators, and school psychologists, not the students themselves. Attempts are made in the PSDP to train students to assess and modify their own performance. They are referred to personnel such as teachers and counselors only to gain assistance if they are experiencing specific problems while progressing through the self-instructional materials, to check out their assessment data and modification plans, and to monitor and evaluate their plans as they attempt to implement them. However, the PSDP assumes that such "counseling personnel" would receive as much training in the techniques and procedures of behavior assessment and modification as they would if they were operating as the behavior modifiers in these other programs. It also assumes that if each student can be trained to take a leadership role in assessing and modifying his behavior, a decrease in excessive dependence of students on school personnel for discipline will occur.

4. The PSDP assumes that students do not have to be encouraged to look for "underlying causes" or "roots" of their behaviors. This approach directly contradicts psychodynamic theories which claim that human behavior problems are superficial symptoms of internal conflicts. However, it is compatible with current social learning theory and research, and behavior modification approaches to counseling, which search for

> behavioral referents for the client's complaints; thereafter they identify the precise conditions that seem to be maintaining and influencing his problems so that appropriate rearrangements can be designed to achieve more advantageous outcomes....[They] then offer courses of action to help him achieve his own goals, leaving the choices to him whenever possible and as soon as possible (Mischel, 1968, p. 280 & 271).

The PLE's used in the PSDP attempt to help students to identify which specific observable behaviors might be acquired, maintained, performed more often, or

improved (i.e., reduced or replaced). Following this, students are aided to identify the stimulus conditions which might elicit and maintain these behaviors in their own lives. After reviewing what they feel might be the consequences of their current performance and of possible changes in it, they decide if they wish to make modifications in their actions. Students desiring behavior change assistance are given an opportunity to investigate and formulate alternative plans of action following which they implement these plans on the basis of individualized schedules. Adult problem-solving assistance at key checkpoints is provided throughout this process especially in the culminating step which involves joint decision making to evaluate the degree and nature of behavior change which has taken place. Student leadership and personal choice opportunities occur during the complete process.

5. The preceding discussion indicates that the instructional process outlined in the PLE's emphasizes instructional activities at a variety of learning levels. It is assumed that to be optimally effective an instructional approach to behavior modification must contain objectives requiring that students be able to do more than know and understand a series of facts, concepts or principles. By using key words such as those identified in Bloom's (1956) taxonomy, the levels of learning in the PLE's can be outlined. The initial PLE steps (i.e., step one, two, and part of three) focus on helping students to know and understand various academic and social behaviors as well as the stimulus conditions which might be controlling such behaviors for students and the consequences to which such behaviors might lead. In these steps also they are given opportunities to apply what they have learned to their own personal performance. Subsequent steps (i.e., last part of step three through step seven) in this instructional process help students: to analyze both whether or not they wish to modify their performance and various plans for accomplishing such behavior change; to synthesize the information they have gathered into individualized plans and schedules of actions; and, to implement and evaluate these plans. These activities are suggested by the following

student objectives developed for PLE's aimed at aiding students to improve (i.e., reduce or replace) behaviors which may not be facilitating the acedemic and social development.

STEP 1. You will be able:

a. to explain why this learning activity was given to you, and
b. to pick out the behavior or behaviors with which you have difficulty.

STEP 2. You will be able to pick out the things that happen <u>just before</u> and <u>just after</u> the behavior or behaviors with which you have difficulty.

STEP 3. You will be able:

a. to pick out results of your behavior that you might dislike, and
b. to decide if you want to change your behavior.

STEP 4. You will be able to choose a "best" plan and a second plan to change your behavior.

STEP 5. You will be able to set up the details of your best plan.

STEP 6. You will be able:

a. to keep a record of your progress for at least three weeks, and
b. to change your plan, or use your second plan, if your need to.

STEP 7. You and your teacher will be able to agree that you have changed your behavior.

6. These instructional objectives written for students who have performed "behaviors to be improved" represent only part of the behavior assessment and modification emphasis of the PSDP. Another type of PLE's is directed toward "behaviors to be encouraged." These PLE's attempt to positively reinforce students who have already performed specific academic and social behaviors which usually produce desirable results. Students then receive the opportunity of using instructional assistance to help them maintain these behaviors or perform them more often in the same or in similar situations. Another type of emphasis in PLE's focuses on enabling students to acquire and subsequently perform behaviors which they have not been able to perform previously. In this context of multiple treatment alternatives based on objectively observed assessment data, the concept of a "behavior problem" takes on a meaning dissimilar from the negative connotation it often has

when used in mental health programs. A problem occurs whenever a student perceives a discrepancy between his present status and the level of performance stated as one of his goals. Here, the word "problem" and "need" are synonymous. A student's need might just as validly be to perform more often in the same or in a new situation a desirable behavior he already has emitted as it would be for him to replace a behavior which has produced undesirable results.

The assumption basic to this variety of treatment approaches is that in order to be effective assessment and modification assistance must be individualized to each student's needs. Assessment data then must exert a strong influence on the behavior change techniques selected by students working on problematic behaviors. The best possible treatment must be designed for each individual problem.

If this attempt to avoid bifurcation of assessment and treatment is successful, we will not find statements by reviewers of mental health programs such as: "In the past, attention to identification has been so great that little energy has been left for interventions (Morse, Finger & Gilmore, 1968, p. 468)."

PSDP Behavior Assessment and Modification

Two behavior assessment strategies, the critical incident technique and situational tests, are being studied for implementation in the PSDP. Both strategies are direct approaches which attempt to eliminate extensive observer judgment in collecting observations of student behavior. It is proposed that ultimately the PSDP use the critical incident technique as the main strategy and intermediate academic levels; however, we are currently field testing it only at the intermediate level. At the secondary level, situational performance tests are proposed as the main strategy for observing and recording student behaviors; therefore, our recent field testing activities of these tests have been confined to that level.

The strategies attempt to assess each student's typical performance so that it can be said that the behaviors observed are <u>representative</u> of what each student would do given similar conditions or situations again in real life settings. These

are intended as measures of what a student *does* in a real situation or in one that simulates real life. Unlike our strategies, standardized measures of performance sample what a student *can do*, or *is able to do*, not what he *does do*.

Flanagan (1962) provides a cogent discussion of this difference as he reviews a major portion of the research and development efforts that his thinking has stimulated in the areas of the measurement of typical performance. He points out that

> it is very important for obtaining comparable measures on the performance of individuals to standardize the tasks, conditions, and evaluation procedures involved in the process. The techniques involving standard samples are devised to make all aspects of the measurement situation as uniform as possible for the persons being tested. This standardization is very effective in obtaining comparable measures on defined aspects of performance but it is purchased at the price of sacrificing many specific factors in the material or real situations which are being simulated (chapter 6, page 1).

Flanagan's work using critical incidents, situational tests, and standardized assignments is basic to the PSDP into which many of his materials and procedures are being integrated. The purpose of the PSDP is not to gain comparable measures of performance so that comparisons can be made among students. The Program as currently being investigated is intended for a program of individualized education where the assessment process is as individualized as is the instructional process. Assessment data obtained on each student in the PSDP are used to help him think about his current development status and his related goals. This is assessment with treatment (i.e., the application of behavior modification techniques) implications. This individualization of the assessment and modification processes demands that interpretation of the assessment data be minimized so that little if any of the recorded data are lost. To accomplish this, we are attempting to have behavior modification programs for action stay as close to that data as is feasible and to avoid the need for summary or sub-category scores. Too often in psychological measurement, gross generalizations are made from such scores and are

particularly unjustified on the basis of the performance sampled.

Performance Record

In order to assess student performance related to some of the previously listed eight general objectives for students in the PSDP, critical incidents have been used to identify effective behaviors enabling students to achieve each objective or ineffective ones inhibiting such progress. Observers using the Performance Record, a comprehensive list of these behaviors categorized according to the related objectives, then assess students' behaviors at school by recording the critical incidents that occur. In this way, the assessment strategy is applied in natural or real situations and necessitates that the observer wait to see if the students engage in critical incidents of effective and ineffective behaviors without prompting or cueing.

There are two key considerations in the use of this assessment strategy. First, the observer must understand what consequences a student is expecting when he engages in an overt response identifiable as a critical behavior for him. This understanding of a student's purpose is necessary for the individualized use of this assessment technique. Because of this requirement, observers not well acquainted with the observees should not use this strategy. Our current field test activities involve only teacher implementation of the Performance Record. Second, the observer must be able to discriminate between behaviors that are and are not critical for the development of each student. The consequences of a student's critical incident clearly must be either effective in assisting him to develop so that he achieves the objectives of the Program or ineffective and therefore interfering with this development. What is critical for one student might not be critical for another student. Teachers are ususally the main source of such personalized information on students and, therefore, are probably the persons most capable of using the Performance Record. Since these incidents to be observed and recorded are "critical" to student development, they occur as exceptions to the usual pattern of interaction in school settings. Because of the requirement that the behaviors

be outstanding enough to be noteworthy, minute-by-minute, or even hour-by-hour, recording is not necessary. However, to prevent memory errors, we are trying to encourage teachers to note a few pertinent facts about incidents as soon as possible after they occur and then to set aside a regular period of time to classify the behaviors observed.

Social Situations Test

This assessment strategy is used for the same purpose as is the Performance Record. Its distinctive design and implementation necessitates the use of realistically contrived situations in which the students know they are being observed. Here, students are taken, individually or in small groups, through a series of problems simulating real-life circumstances they might be expected to handle in or out of school. In this performance test definite attempts are made to elicit student behaviors.

Some of the social skills of students in specific settings are assessed by their peers who observe their reactions to structured social situations, some of which involve student actors. For each situation, an observer has a record sheet which consists of a list of critical behaviors for him to observe. When a behavior on the list occurs, he indicates which student performed it. The behaviors which are on these record sheets are representative of behaviors related to some of the general PSDP objectives. Students are asked to discuss problems in pairs or to participate in small group situations, and the behaviors they exhibit under these circumstances are taken as indicators of the nature and extent of some of their various social skills in these situations. In addition to being a participant in the social situations, each student is asked to be either an actor or an observer. Students are participants in the social situations one half of the time. The test is run in two sessions, each lasting about two hours. Those who are participants in the first session become actors or observers in the second session and vice versa.

Prescribed Learning Experience Booklets

The PSDP is being researched not only as a method for helping students to achieve an understanding of the present status of some of their academic and interpersonal skills and behaviors but also as a process for aiding them to formulate and pursue immediate and long-range goals related to these behaviors. The behavior modification portion of the Program is a means of assisting those students who would like to change their performance in specifiable ways. Students are given opportunities to understand and supplement the information collected through the behavior assessment strategies, to decide whether or not they wish to take advantage of the behavior modification assistance offered, to formulate behavior change goals and plans for achieving these goals, and then to attempt the achievement of these goals.

Self-instructional booklets are currently being studied as the PLE media for the implementation of this behavior modification approach. Booklets are recommended only for students who seem to have identifiable needs which when resolved would mean they had progressed toward attaining the general student objectives of the PSDP. As noted earlier, these booklets, like any to be used in this prescriptive component of a comprehensive guidance system, include a series of sequential steps which are intended to enable students to progress toward attainment of their own academic and social goals related to these general PSDP objectives. These are the steps in which each student is helped to recognize why the PLE was recommended for him, to decide whether or not he wants to modify at least one of his behaviors, to supplement the available behavior assessment data, to design and use a technique and a plan for modifying his behavior, and to evaluate his plan and check his progress with his teacher or counselor periodically. Attempts are being made to introduce a variety of instructional activities (e.g., group discussion, analysis of cartoon sequences,

role play, adult consultations, and participation in reinforcing activities) into each booklet. We hope that this prescriptive aspect of the PSDP ultimately will include other media besides booklets. For example, individual or group counseling activities conducted by trained personnel might be other PLE recommendations available to students. It is anticipated that such PLE's would be less detailed but would progress through a process and a sequence of learning activities similar to the ones indicated by these steps.

In an individualized educational program such as Project PLAN, PLE recommendations can be integrated into a student's program of studies very smoothly if he and his teacher, counselor, and parents agree to their applicability for him. This next school year we hope to experiment with Project PLAN's computer-monitored process for the implementation of the PSDP. The computer will be used to process assessment data recorded by the teachers using the Performance Record or by the student observers in the Social Situations Test. For example, where the teacher records a certain number of effective (i.e., behaviors to be encouraged) or ineffective (i.e., behaviors to be improved) critical incidents for a student related to one of the PSDP objectives, he or she will submit these to the computer by communication cards. The computer by keeping track of the timing and sequencing of these incidents in order to note trends rather than chance fluctuations in student performance will be able to recommend a relevant PLE which the student and his teacher will consider integrating into the student's program of studies. The booklets will be available in the classroom or counseling offices if the recommendation is accepted.

Our present field testing experiences are being conducted in instructional settings which resemble individualized instruction as much as possible. Results to this date suggest that these booklets will be able to help students modify

their behavior. Field test and revision activities are planned for the remaining months of this school year.

Summary

Current exploratory work on one element of one component of the development and evaluation of a comprehensive guidance system has been reviewed. This element, the Personal and Social Development Program (PSDP), is an attempt to assist students in the assessment and modification of their academic and interpersonal behaviors. Designed to operate within an individualized educational context where computer-monitored resources are available, this element is intended as an important part of the prescriptive phase of guidance focusing on problem delineation and correction. Much of the preliminary development work clarifying the objectives and assumptions of the PSDP and implementing the Program with intermediate and secondary students has been completed and is now being field tested. Controlled experimentation of the effectiveness of the prescribed learning experience booklets is planned for this spring and next fall. The main criterion for such experimentation will be the extent to which these PSDP booklets assist students to modify their behavior in order to accomplish their goals related to the broad objectives of the Program.

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